

LONG-TERM PERSPECTIVES AND STUDENT RELATIONSHIP VALUE FOR HIGHER EDUCATION INSTITUTIONS

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ABSTRACT: Based on the stakeholder view, this paper discusses the importance of the relationship between higher education institutions and students. With a special focus on this relationship, the author describes service management with a broad and strategic view toward establishing and improving a long-term relationship. In the context of lifelong learning, students return to the higher education institution many times throughout their lives in order to update their knowledge. Therefore a relationship-oriented higher education management should be applied and in the following its different aspects and tasks will be described.

1. INTRODUCTION

In recent years, higher education policy in Europe has been characterised by increasing reliance on the differentiation of the higher education system as a modernisation factor, by the catalytic forces of the Bologna Process toward shifts in thinking and acting within higher education institutions (HEIs). Meanwhile, these institutions are being granted more autonomy and their focus in the resulting competitive situation [1] is expected to become customer-oriented [2] [3], cost-aware, and sensitive towards the needs of society. The approach adopted by public authorities with regard to HEIs has essentially transformed, and the shift towards enlarged 'managerialism' has been seriously influenced by ideas of the 'entrepreneurial universities' [4].

Market and stakeholder orientation leads to a competition-oriented higher education system and to new profile development at the institutions consequently underlining the need for innovative management instruments. Meanwhile, HEIs have demonstrated a certain amount of resistance against the adoption of new models as well as reform ideas. In many cases, Humboldt's ideal of freedom for teaching and research runs counter to Machiavellian objectives and measures as well as the state and governmental influence. Thus, there is a conflict of priorities between the impulse for renewal and the necessity for control on the policy, institutional, instrumental and individual levels [5].

HEIs are knowledge-based expert organisations with a strong focus on teaching and research. Recently, HEI leaders tend to think of community services as the third pillar or third mission, and they have begun to pay more attention to such services as lifelong learning, knowledge transfer and community outreach. In fact, institutions are compelled to search for competitive advantages and funding sources. To explore these HEIs have to develop a service organisation and culture. HEIs have to change away from being ivory towers and have to be transformed into (long term) relationship-based organisations to their stakeholders.

The relationship management approach as an solution is theoretically based on the idea of stakeholder-value and customer relationship management. HEIs have to identify their stakeholders and develop specific strategies to use the relationship to these stakeholders in a proper way. The framework described in this article is a model. Its theoretical and practical issues will be discussed below, following the development of the framework of relationship management as well as the preliminary experiences with this model at the Danube University Krems (DUK) Austria. Some of its

elements have already been implemented at the DUK. Being an European "model project" of a state university offering only postgraduate programmes, it is among the most entrepreneurial universities within Europe's higher education landscape for generating more than 75 percent of the annual budget from third party, mainly postgraduate study programme fees.

2. THE RULES OF RELATIONSHIP MANAGEMENT

The "changes in knowledge transfer" from teaching to learning refer to a customer orientation in which the "potentials and processes are coordinated with the learning prerequisites provided by the students" [6]. The examples are a new flexibility of the learning environment, modularisation or the use of e-learning. Improvement of an institution's services occurs by adaption of services towards students' needs, as well as through the better use of students as external factors. This customer orientation is reflected in the main processes of HEIs, i.e. teaching and research, as well as in the perception of students, strategic partners and enterprises as "customers". Even the core competences of HEIs are still knowledge development, transformation and sharing, HEIs are going to become a "partner for life" through lifelong learning. As a knowledge service organisation, HEIs are not yet prepared for this shift. The first steps toward creating new relationships and developing competitive advantages for the institution include initiatives such as alumni management, technology transfer centres or continuing education centres based on the core missions of teaching, research and academic services.

More and more scientific studies are adopting "customer orientation" as the policy of reform efforts at HEIs [7]. The approaches, for example, of Hansen to turn HEIs into real service providers are becoming increasingly accepted within HEIs and the relevant ministries. These demands are reinforced by the causality between services and the HEIs [8]:

- Services are immaterial. At HEIs, they include research (in the sense of the progress of knowledge) and teaching (as knowledge transfer) [9] [10].
- Services are largely about experience and trust, and are thus a priori not entirely measurable [11]. For example, the evaluation of the quality of teaching only takes place during or at the end of studies. Students have to trust the HEIs to follow on the evaluation results.
- Services, moreover, require an external factor – one of this are the students at HEIs – which actively participates in the production process of the service and thus has an influence on the output quality.

Competition at the educational market leads to transition from a sellers' market to a buyers' market. This shift forces HEIs to critically examine their own potentials and processes and to better orient themselves to the various demands [12], [13]. In a sellers' market, there is little incentive to focus on needs of different target groups. In recent years, however buyer's market orientation finds his routes in the implementation of new funding mechanisms. Decreasing state funding for HEIs as well as more accountability forced by the ministries on the one hand and more managerial freedom on the other hand are driving forces of this market change.

There are different approaches to the theoretical examination of the education market as a buyers' market. Ruch calls this "trusting the marketplace" [14], Slaughter and Leslie even speak of "academic capitalism" [15], and Keller sees a "management revolution" [16] at HEIs more and more arriving in Europe. These considerations indicate a shift from a transaction-oriented and knowledge-based perspective to a relationship-oriented perspective in higher education management. To implement such a perspective HEIs have to identify the key benefits for students regarding university-student-relations. The advantages for students of this relationship orientation are systematised by Hennig-Thurau and Klee [17] stating following benefits:

- **Social Benefits** refer to the forming of social relationships between customers and HEIs. For example the social integration of students into the HEIs [18], as well as into the HEI's community as a network or social class.
- **Confidence Benefits** result from the degree to which students and graduates have confidence in the actions of the HEI and its members.
- **Special Treatment Benefits** result from the degree to which customers experience individual care by the HEI.
- **Identity-related Benefits** refer to the advantages of the public prestige and image of the HEI and the positive consequences they have on professional life.

Such relationship orientation can be found in quality assurance mechanisms like student satisfaction surveys. Satisfaction ratings and evaluations of teachers and courses are a necessary, although not the only, requirement for building long-term relationships between students and any given HEI. Today, due to the lifelong learning approach, we assume that students will not only study at the HEI once, but they will return to the (teaching) services of the HEI again and again over time. Thus, the relationship with HEI takes on the character of lifelong companions. However, most HEIs are not yet prepared for this kind of commitment. Their potentials, processes and outcomes of an HEI are not yet ready to form the basis of this commitment. Hansen emphasises that the HEI's processes and potentials are rarely coordinated because "the desired outcome quality is not always clearly defined and because the potentials and processes are not interpreted clearly enough as determinants of the outcomes" [19].

Today, students are the HEI's venture capital. Something similar applies to alumni, who open up attractive cooperative and financing opportunities for HEIs above and beyond the students' study fees. Thus, one of the paramount tasks of the HEIs is to structure its relationship to these two groups without restricting students' freedom in the process. This relationship management stands for the development and implementation of a new stakeholder-centred higher education strategy. A re-orientation of all the processes and responsibilities of HEIs towards stakeholders has to take place in order to implement

relationship management. Relationship management has to be a higher education strategy aided by state-of-the-art technologies and should be used to optimise the quality of the relationship between the HEI and its stakeholders in the long term. The task of relationship management is therefore to analyse, plan and structure the connection channels of the stakeholders.

Along the lines of McKenna [20] and Diller [21] the basic principles of Relationship Management are as follows:

- **Intention of a unique relationship:** The objective is to set up a special relationship, which has the goal of beneficial cooperation for all parties involved.
- **Individuality towards stakeholders:** Different types of stakeholders should receive different service options.
- **Information on stakeholder:** In order to be able to fulfil the first two points, it is inevitable to obtain, store and analyse as much comprehensive information on the relationship and stakeholders as possible.
- **Integration of stakeholders:** Stakeholders' should be connected to the HEI in the best way possible, according to their role.
- **Interactions with stakeholders:** The only possible way to gather data and information or to build up a relationship is through interactions with stakeholders.
- **Investment in stakeholder relationships:** None of these steps can be realised free of charge. Relationship management requires the readiness to commit oneself also financially. This is more than cost-covering, real investments in relationship with stakeholders are necessary.

These six I's are the basic driving forces for strategic relationship management. The framework for relationship management is based on these rules and has to follow them by creating specific tasks and actions to improve the effectiveness and efficiency of the relationship with the stakeholders.

The key element of the information technology revolution, particularly the internet, is the opportunity it gives HEIs to choose how they interact with their stakeholders. The internet opens up the possibility to create better relationships with stakeholders than was previously possible in the offline world. By combining the abilities to respond directly to potential student requests, or on the other hand to provide the same stakeholder group with highly interactive customized services, HEIs have a greater ability to establish, nourish, and sustain long-term relationships today than ever before. This is also necessary for opening the gates of the ivory towers, as was mentioned earlier.

Gibbons at al. describe this situation as Mode Two knowledge production [22]. Whereas Mode 1 is seen as discipline-oriented, homogenous, stable and more hierarchically organised, Mode 2 is seen as transdisciplinary, heterogeneous, heterarchically organised and transient. In Mode 2, value, sustainability and social acceptability are fundamental criteria in the evaluation of quality. In Mode 1, it was the academic communities that "spoke" to society. Under Mode 2, society "speaks back" to the academic communities. Thus, the conventional academic model of "open science" and discipline-based research driven by internal reflection is challenged [23]. The connectivity between HEI and their stakeholders is more complex and therefore strategic management of the different relationships to different stakeholders' groups is needed. The hybridisation between forms of knowledge and forms of organisations, and previously separated realms of society are becoming more and more convoluted. Figure 1 illustrates the complexity of stakeholder relationships in Mode 2:

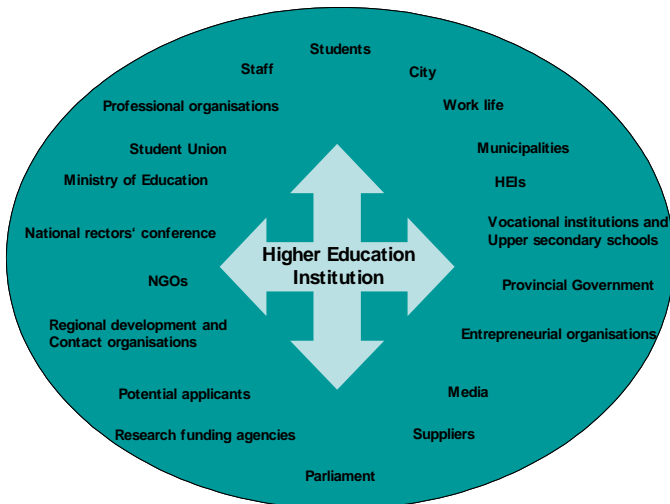


Figure 1. HEI relationships in Mode 2

The named relationships in Figure 1 could be divided into relationships between the HEI and governmental bodies, businesses, and customers. All three groups need different relationship strategies and activities. The success of the HEI is significantly determined by the quality of these contact points between the outside and inside world of the institutions. It is an absolute requirement to manage all these different levels and highly differentiated relationships in a systematic framework.

3. THE RELATIONSHIP MANAGEMENT MODEL

The crucial point is what higher education managers need to know about their stakeholders and how this information is used to develop a overall relationship perspective. A specific example of one stakeholder group is used below to introduce the relationship management model. As one of the key customers of HEIs, the stakeholder group of students was chosen for this exercise. The target audience contains the whole student life cycle, from first contact with a potential student until the person achieves graduate status and enters the alumni phase. The basic model includes a set of seven basic components [24]:

- a data of target audience activity
- analyses of the database
- given the analyses, decision about which part of audience to target,
- tools for targeting the audience
- means to build relationships with the targeted audience
- privacy issues
- metrics for measuring the success of the relationship management program

The creation of a target audience database file is an essential first step toward a full relationship management solution. This is the groundwork for all relationship-based activities. In the case of students, this includes student records but also involves seeking historical student contact data from the student service centre. What are the important elements? Preferably, the database should include information about the following:

Transaction – contains a whole study history with additional details (class attendance, study and research profiles, university activities such as sports or jobs e.g. at the institute or centre)

Student contacts – nowadays, there is an increasing number of student contact points via various channels and environments. This should not only include marks and number of semesters,

but any student- or HEI-initiated contact (student request for a dormitory place or HEI invitation to a conference, etc).

Descriptive information –e.g. origin, age, etc. This is for segmentation and other data analysis purposes.

Response to communication stimuli – This part of the information file should contain information on whether or not the target person responded to a communication initiative triggered by the HEI as well as any other direct contact.

The following figure shows basic data sources:

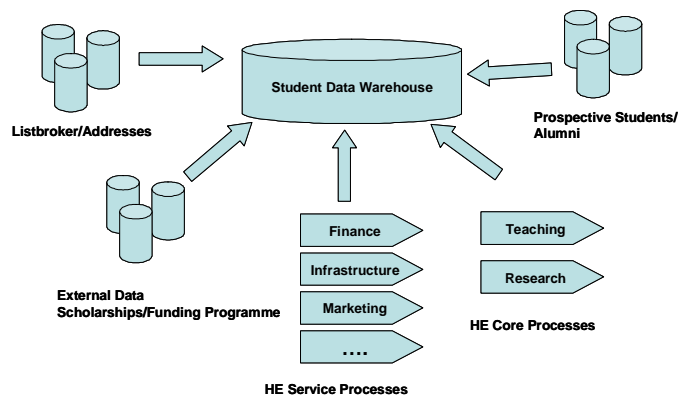


Figure 2. Student Data Warehouse

Traditionally, student databases have been analysed with the intent to define drop-out rates, average length of study, ratio of male to female, etc. If the HEI would like to play a better role in the LLL process and bring graduate students back to the HEI multiple times for more than just class reunions, then it must also consider marketing campaigns for LLL programmes, or even use the data to develop tailored and customised programmes for adults and professionals. But this target audience could also be more profitably used for sponsoring and fundraising activities. This is shift in a view towards the students; interaction with them occurs not once but several times and a lifetime student is valued through developing different common activities and exchange processes. This could lead to increasing the number of HEI services, higher study fees and increased income for the HEI, reducing marginal costs of the HEI's products and services, or reducing student acquisition costs e.g. for LLL programmes.

To underline the model there is an example of database management at DUK. There were once seventeen different databases at the DUK. Nearly every department had its own database. A wide range of different IT solutions were found, from a single excel list to a self-developed access database, to other more professional solutions. The challenge was to coordinate and manage a university wide contact, campaign management as well as marketing activities and to help the subunits to improve their marketing in order to attract more students. In line with this data quality, redundancy and analysis of potential student segments had to be improved to create competitive advantages for the university. Finally – after a three-year project – the university now has a single database; all corporate units and data entities have been integrated in one large database with the same interface and programme for everyone to support the relationship between the university and its clients, students, etc. Therefore nowadays the clients (prospective students, students, alumni but also companies) have not only numbers and basic contact information but a set of different information related to their relationship to the university in the relationship management database.

The next step in the framework is to find the fit between HEI services and study programmes and the right customers. The main problem is that the best way to know the needs of a customer is to maintain direct and high frequency interaction. In this way, the HEI is able to gather the right and highest quality information. Figure 3 shows different HEI units and their usual interaction “attitudes”. The most important part for collecting data is the upper left quadrant. Because this group of staff members has the highest interaction frequency, know the students better than others at HEIs and therefore able to collect detailed information.

		student interaction	
		direct	indirect
interaction frequency	high	teaching staff, programme director	dean of faculty, marketing dept.
	low	student administration student service centre	rectorate

Figure 3. Student interaction matrix

On the other hand there are some disadvantages in data development in the upper right quadrant as well as the lower left quadrant. Deans but also marketing people are responsible for the development of the relationship and marketing strategy but usually do not have direct and intensive contact with the students. Student admission office and other administrative units have a support function and are a very important student interaction or touch points. This is also a reason that many HEIs recently improve their student services as well as the organisation of student administration. In the past this units were structured regarding their tasks and mostly worked separately. So students had only once a semester a contact to each of these offices. The University of Economics, Vienna, Austria for example implements a one stop shop for student services. This means that all administrative issues for students are in the same office which offer better students’ services and help students to fulfil the administrative tasks like admission etc. The lower right quadrant is highly dependent on the other three since the rectorate is less involved in gathering data but on the other hand it is very important to have the valid and pertinent information for decision-making in strategic planning. Therefore, the rectorate should motivate the other units to develop a useful and effective database.

The collected information is used to identify particular segments and groups. This means, for example, selecting a marketing activity especially for a target group of a newly established programme. There could be various motivations for such a selection beyond the issue of teaching, such as a new fundraising project, lobbyism, etc. If the potential target audience is not clearly identified, the actions and activities cannot be conducted in an effective and efficient way. Furthermore, even if the HEI selects the right target audience, the targeting actions are also essential. Also HEIs is have to move from mass marketing approaches such as television, radio, or print advertising to segment oriented relationship marketing. This is one of the reasons why the DUK decided to use more unconventional approaches, such as direct mailing,

telemarketing, and internet marketing as a new portfolio of marketing activities. Peppers and Rogers [25] have long urged business companies to begin to dialogue with their customers through these kinds of targeted approaches rather than talking “at customers with mass media”. After nearly ten years, HEIs are also discovering the possibilities of relationship marketing.

If the HEI would like to implement relationship marketing, then the institution needs a retention programme as well. In this context, retention means that the HEI offers special services for students and alumni (or for other potential target audiences). This allows the HEI to increase its retention rate. At this point, the question of the relationship between product and service satisfaction and the institutional success arises. New quality management tasks in higher education are examining this issue via e.g. student satisfaction with teachers and teaching programmes. It is already understood that the institution must constantly measure satisfaction levels and develop programmes that help them deliver performance beyond the expectations of the targeted audience. There are different ways to focus on retention, such as, for example, loyalty programmes (recognisable from “other sectors” such as frequent flyer programmes by airlines, etc). Customization is another a good example. Some HEIs are already addressing this by running in-house-programmes for different companies. This means that the HEI is focusing on the needs of a certain company (or companies) by offering a tailor-made programme for the company’s employees. Community-building activities are another typical type of retention orientation. Another example is alumni management, and the provision of alumni network services.

The relationship management system depends upon a database of the target audience and analysis of the data for further effective targeting of marketing communications and relationship-building actions. There is an obvious connection between the ability of HEIs to deliver services better and the quantity and quality of information it needs to enable this delivery. It is important to note, however, that along with the popularity of the internet, many HEI stakeholder groups are concerned about the amount of personal information contained in databases and how the HEI uses it

The new idea of relationship-oriented higher education management means that new indicators used by higher education managers to measure the success of HEI services and products have to be introduced. Up to now, indicators in higher education are developed mainly from an administration perspective and less from a managerial point of view. Information management and decision-making support systems are still underdeveloped. The DUK uses a software tool that measures success of marketing measures, e.g. by counting the response rate to a direct mailing. DUK can also measure certain specific financial data, such as the cost of student recruitment. All such measures reflect an improved system for acquiring and processing internal data in order to determine how the HEI is performing at the stakeholder level.

4. CONCLUSION

In future, HEIs have to make better use of their relationship capital towards students and alumni. If alumni are only a group of former students, and as such they can support the university via sponsoring and other contributions, it is already too late. Instead, the alumni work has to begin when the students first make contact with the HEI, even before they begin their studies. The potential relationship with alumni can only be used if the process of forming the relationship is not a purely

isolated activity, but as part of a process in the sense of a full life cycle. Therefore, it is essential to shift from a knowledge- to a relationship orientation within the HEI. The relationship can be better structured and used over the long term if it is oriented toward each of the various life-stages of students. But other stakeholder relations could be managed in the same way focusing on different life-cycle of the relationship.

Professional management is required for higher education institutions to act as autonomous organizations and to behave entrepreneurially and proactively rather than as subordinate to central governments. Professional management also enables higher education institutions to co-operate more frequently and more effectively with partners varying from local businesses to international enterprises and other stakeholders. As HEIs grow larger and more extensive, the functions demanded of their multiply, and academic administration and management are increasingly complex; the need for skilled management and administrative personnel becomes more urgent. The days of rectors performing ceremonial duties as their main task are definitely over, as are the days when deans could do their jobs on a Friday afternoon. Nowadays HEI managers need specific knowledge, but also specific (analytical) skills and an appropriate attitude. The sustainability of higher education reforms in general, and in the EU candidate countries in particular, will be directly proportional to the level of professionalism in higher education management.

Finally, the customer-oriented management is about creating framework conditions that make it possible to proactively proceed in the service processes of the HEI [26]. It is necessary to systematically stimulate stakeholder relationships towards segment-specific strategic objectives so that the desired success and an ideal type of relationship can be assured in each stage. The special service character of education has already been addressed more than once.

Direct contact with stakeholders is advantageous for achieving the objectives in each stage of the relationship. If direct contact with stakeholders is maintained, it is much easier to collect data on the stakeholders' subjective perception of the higher education service. Indirect contact increases the complexity as well as the expenditure of the information exchange [27]. The high intensity of the relationship, particularly between students and the HEI, also makes it possible to collect data regularly and therefore to renew and adjust the relationship accordingly. The elementary categorisation of the individual stages also becomes easier. It is important that this system is understood not as a rigid conception, but as a flexible instrument for optimising the relationship between HEIs and their stakeholders.

REFERENCES

1. Hödl, E.; Zegelin, W. Hochschulreform und Hochschulmanagement, Marburg: Metropolis Verlag (1999).
2. Hansen, U. "Die Universität als Dienstleister: Thesen für ein leistungsfähigeres Management von Hochschulen", in: Dienstleistungsorientierung in der universitären Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stauss, B.; Balderjahn, I.; Wimmer, F. (eds.), Stuttgart: Schäffer-Poeschel Verlag, p. 369-385 (1999).
3. Pausits, A., Student Relationship Management. Universität Flensburg, Flensburg (2006)
4. Burton Clark. The entrepreneurial university: Demand and response. *Tertiary Education and Management*, 4(1):5-16, March (1998)
5. Fröhlich, W.; Jütte, W. "Qualitätsentwicklung in der wissenschaftlichen Weiterbildung", in: Qualitätsentwicklung in der postgradualen Weiterbildung, Fröhlich, W.; Jütte, W. (eds.), Münster: Waxmann Verlag GmbH, p. 9-21 (2004).
6. Hansen, U. "Die Universität als Dienstleister: Thesen für ein leistungsfähigeres Management von Hochschulen", in: Dienstleistungsorientierung in der universitären Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stauss, B.; Balderjahn, I.; Wimmer, F. (eds.), Stuttgart: Schäffer-Poeschel Verlag, p. 369-385 (1999).
7. Bastian, H. "Der Teilnehmer als Kunde -der Bildungsauftrag als Dienstleistung", in: Pädagogisch denken - wirtschaftlich Handeln. Zur Verknüpfung von Ökonomie und Profession in der Weiterbildung Bielefeld, Bastian, H. et al. (eds.), Bertelsmann Verlag, p. 11-25 (2002).
8. Bastian, H. "Der Teilnehmer als Kunde -der Bildungsauftrag als Dienstleistung", in: Pädagogisch denken - wirtschaftlich Handeln. Zur Verknüpfung von Ökonomie und Profession in der Weiterbildung Bielefeld, Bastian, H. et al. (eds.), Bertelsmann Verlag, p. 11-25 (2002).
9. Sinz, E.J. (1998b) "Konzeption der Untersuchungsmethodik", in: Gestaltungskonzepte für Hochschulen: Effizienz, Effektivität, Evolution, Küpper, H. J.; Sinz, E. J. (eds.), Stuttgart, p. 2-13
10. Hansen, U. "Die Universität als Dienstleister: Thesen für ein leistungsfähigeres Management von Hochschulen", in: Dienstleistungsorientierung in der universitären Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stauss, B.; Balderjahn, I.; Wimmer, F. (eds.), Stuttgart: Schäffer-Poeschel Verlag, p. 369-385 (1999).
11. Wochnowski, H. Anwendbarkeit von Instrumenten der Dienstleistungsqualitätsmessung", in: Dienstleistungsorientierung in der universitären Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stauss, B.; Balderjahn, I.; Wimmer, F., (eds.), Stuttgart: Schäffer-Poeschel Verlag, p. 287-310.(1999).
12. Rothschild, M.; White, L. "The University in the Marketplace: Some Insights and Some Puzzles", in: Studies of Supply and Demand in Higher Education, Clotfelter, C.; Rothschild, M. H., (eds.), Chicago: The University of Chicago Press, p. 11-42 (1993).
13. Stauss, B.; Balderjahn, I.; Wimmer, F. (eds.) Dienstleistungsorientierung in der universitären Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stuttgart: Schäffer-Poeschel Verlag (1999)
14. Ruch, R. S. (2001) Higher Ed, Inc.: The Rise of the For-profit University. Baltimore: Johns Hopkins University Press
15. Slaughter, S.; Leslie, L. L. *Academic Capitalism*. Baltimore: Johns Hopkins University Press (1997).
16. Keller, G. *Academic Strategy: The Management Revolution in American Higher Education*. Baltimore: Johns Hopkins University Press (1983).
17. Henning-Thurau, T.; Klee, A. "The Impact of Customer Satisfaction and Relationship Quality on Customer Retention", in: *Psychology & Marketing* 14, No. 8, p. 737-764 (1997).
18. Tinto, V. (1993) *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd Edition. Chicago: The University of Chicago Press
19. Hansen, U. "Die Universität als Dienstleister: Thesen für ein leistungsfähigeres Management von Hochschulen", in: Dienstleistungsorientierung in der universitären

- Ausbildung: Mehr Qualität im betriebswirtschaftlichen Studium, Stauss, B.; Balderjahn, I.; Wimmer, F. (eds.), Stuttgart: Schäffer-Poeschel Verlag, p. 369-385 (1999).
20. McKenna, R. Relationship Marketing - Successful Strategies for the Age of the Customer. St. Gallen: Perseus (1991).
 21. Diller, H. "Customer Loyalty: Fata Morgana or Realistic Goal? Managing Relationships with Customers" in: Relationship Marketing. Gaining Competitive Advantage through Customer Satisfaction and Customer Retention Henning-Thurau, T.; Hansen, U. (eds.), Berlin, p. 20-48. (2000).
 22. Gibbons M Limoges, C.; Nowotny, H.; Schwartzman, S.; Scott, P.; Trow, M u. a.: The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies. Sage, London (1994).
 23. Arbo, P.; Benneworth, P. Understanding the regional contribution of higher education institutions; A literature review, OECD (1994).
 24. Winer, R. S. "A Framework for Customer Relationship Management", in: California Management Review 43[4], p. 89-105. (2001).
 25. Rogers, M.; Peppers, D. Enterprise One to One: Tools for Competing in the Interactive Age, New York: Doubleday (1999).
 26. Homburg, C.; Sieben, F.G. "Customer Relationship Management (CRM) - Strategische Ausrichtung statt IT-getriebenem Aktivismus", in: Handbuch Kundenbindungsmanagement Bruhn, M.; Homburg, C., (eds.), Wiesbaden: Gabler Verlag, p. 473-505. (2000).
 27. Winer, R. S. "A Framework for Customer Relationship Management", in: California Management Review 43[4], p. 89-105. (2001)

